

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

AIR QUALITY PERMIT

Permittee Name: General Electric Company
Mailing Address: 903 Russell Cave Pike, Lexington, Kentucky 40505

Permit Type: Federally-Enforceable
Review Type: Title V, Synthetic Minor, and NSPS.

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**Application
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Region: Bluegrass
County: Fayette

Issuance Date: July 3, 2002
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**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on January 20, 1998, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**13 (BM-6) Furnace charge bins.**

Description: This emission unit is comprised of the equipment and activities involved in storage of blended materials at the facility. After the mixed ingredients are transferred to the blending system which also receives cullet from the cullet handling emission units, the mixed raw materials and cullet are blended to produce blended batch, which is delivered to the furnace charge bins. The emissions are vented to Flexclean baghouse (BG-1).

Date commenced: Before 1975.

APPLICABLE REGULATIONS:

401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations: None**2. Emission Limitations:**

- a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
- b. Particulate emissions shall not exceed 43.6 lbs/hr [401 KAR 61:020, Section 3(2)(a) and Self imposed to preclude PSD requirements]
Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)] x [100 - baghouse control efficiency]

3. Testing Requirements: None**4. Specific Monitoring Requirements:**

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The permittee shall perform a qualitative visual observation of the opacity from the baghouse stack at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to the baghouse.
- d. The pressure drop across the baghouse.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The qualitative visual observations and any opacity readings which exceed the standard.
- d. The pressure drop across the baghouse.

6. **Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:** None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

11 (F1) The glass melter and refiner.

Description: This emission unit includes the furnace melter and the refiner. The furnace melter receives material from the charge bins. At high temperatures, the material melts to form molten glass. The molten glass passes into the refiner section, where its temperature is lowered and it is refined (trapped gases may be released). This is a natural gas fired furnace with a maximum glass pull rate of 440 tons per day and a rated burner capacity of 75 MCF per hour. The emissions are vented to an electrostatic precipitator.

Construction commenced: September 2, 1987.

Applicable Regulations:

40 CFR 60 Subpart CC/Section 60.290 to Section 60.296 (401 KAR 59:585), Standards of Performance for Glass Manufacturing Plants, applicable to glass melting furnaces constructed or modified after June 15, 1979.

1. Operating Limitations:

Glass pull rate shall not exceed 440 tons/day and 150,920 tons/year.

Compliance Demonstration Method:

Records of the daily glass pull rate shall be maintained at the plant.

2. Emission Limitations:

- a. Particulate emissions shall not exceed 0.1 grams per kilogram of glass pulled (calculated as shown in 40 CFR 60.296 (d)(1)) as required by 401 KAR 59:585, and as measured by Reference Method 5, 40 CFR 60, Appendix A.
- b. Nitrogen oxide emission rate shall not exceed 548.77 tons/year, calculated as a 12 month rolling average. All the NO_x emissions shall be calculated, reported and otherwise used as NO₂. (Self imposed to preclude applicability of 40 CFR §52.21 (401 KAR 51:017), Prevention of Significant Deterioration)

Compliance Demonstration Method:

- a. Particulate emissions shall be calculated as shown in 40 CFR 60.296 (d)(1) as measured by Reference Method 5, 40 CFR 60, Appendix A.
- b. Nitrogen oxide emissions, expressed as NO₂, shall be measured by the continuous emissions monitor (hereinafter called the CEM).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**3. Testing Requirements:**

GE is required to conduct a stack test within one year of permit issuance to show compliance with the particulate standard of 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants. Furthermore, to ensure the NO_x emissions limit remain below the PSD trigger level, GE is required to conduct a NO_x annual performance test using U.S.EPA Reference Method 7 or 7E, and to ensure the proper operation of the NO_x monitor, GE is required to audit the NO_x monitor as follows:

- (A) Relative accuracy test audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the relative accuracy test procedure in performance specification 2 of 40 CFR 60.
- (B) Cylinder gas audit (CGA). A CGA shall be conducted in three of four calendar quarters, but in no more than three quarters in succession. Please follow the procedure described in the data assessment part of 40CFR60, Appendix F.

4. Specific Monitoring Requirements:

To demonstrate continuous compliance with the NO_x emission limitation, in accordance with 401KAR 50:035, Section 7(1)(c)2, the permittee shall:

- a. Calibrate, maintain, and operate devices which continuously monitor and record the NO_x concentration in the gas in the stack leading from, or other approved locations for, this Emission Point as per the requirements contained in 401 KAR 59:005, Section 4. The NO_x monitors shall be certified in compliance with performance specifications 2, as contained in 40 CFR Part 60, Appendix B, and operated as per the requirements of 40 CFR Part 60, Appendix F. The devices shall be in operation at any time the affected facility is operated.
- b. Calibrate, maintain, and operate devices which continuously monitor and record the volumetric flow rate of the gas in the stack leading from this Emission Point. The volumetric flow rate monitors shall be certified in compliance with performance specification 6 contained in 40 CFR Part 60, Appendix B. Location of the monitoring sites shall be approved by the Division.

In addition, all emission monitoring devices shall be properly certified and shall be operated as per the requirements of 40 CFR Part 60, Appendix F, incorporated by reference as Kentucky Procedure 1 requirements set forth in State Regulation 401 KAR 50:015, Section 1(1)(c)4. Data collected by any emission monitoring device shall be used for determining compliance with respective emission limitations and may be used for enforcement purposes. If the data availability of any continuous emission monitoring system is less than 98% for any calendar month, the missing data shall be calculated using the highest hourly measured emissions rate recorded during the preceding twelve month period. Any malfunction of emission monitoring devices shall not be considered a violation or evidence of excess emissions, provided the permittee complies with the requirements of regulation 401 KAR 50:055, Section 1.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The daily glass pull rate.
- b. All information used in calculating the emissions from this Emission Point.
- c. A log of the following (on a daily basis) shall be kept at the source:
 - Raw material usage rates, including the cullet ratio to the total batch delivered to the furnace.
 - Natural gas usage rates (for the period in which it is required to calculate the rolling 12 month annual nitrogen oxide emission rate).
 - Power to the electric boost and duration of supply.
- d. A file of the CEM data shall also be kept and maintained on at least the following items:
 - Emission measurement (strip charts, etc);
 - Monitor performance testing measurements;
 - Performance evaluations;
 - Calibration checks;
 - Adjustments and maintenance performed on such monitoring devices.

6. Specific Reporting Requirements:

To demonstrate continuous compliance with the NO_x emission limitation, in accordance with 401KAR 50:035, Section 7(1)(e)2, the permittee shall:

- a. Provide quarterly written and electronically formatted reports, to the Division's Frankfort Central Office, containing the data provided by the continuous emission devices. All reports shall be post marked by the thirtieth (30th) day following the end of each calendar quarter and shall be submitted in the format specified by the Division. The averaging period used for data reporting shall correspond to the averaging period specified herein for emission limitations. The permittee shall identify the methodology used to determine the above required information in the quarterly reports. NO_x emissions shall be reported as NO₂.
- b. Submit quarterly excess emission reports (EER) to the Division's Frankfort Central Office, in an electronic format specified by the Division. All reports shall be postmarked by the 30th day following the end of each calendar quarter. Excess emissions shall be defined as any measured emission rate in excess of the limitations specified herein. The following items shall be included in each EER report:
 - i. Periods and magnitudes of excess emissions.
 - ii. Nature and cause of each period of excess emissions.
 - iii. Periods during which the continuous monitoring system was inoperative.
 - iv. Records of calibration checks, adjustments, and maintenance performed on the monitoring system.
 - v. Periods when no excess emissions have occurred.
 - vi. Calculations showing compliance with the NO_x emission limit of 548.77 tons/yr.

7. Specific Control Equipment Operating Conditions: None**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Description: The Ribbon machine uses glass drawn from the forehearth. The bulbs that are formed on the ribbon machine are discharged onto a conveyor and sent to the lehr. The emissions are vented uncontrolled.

Date commenced: Before 1975.

APPLICABLE REGULATIONS:

401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations: None

2. Emission Limitations:

- a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
- b. Particulate emissions shall not exceed 0.3 lbs/hr and 1.32 tons/yr [401 KAR 61:020, Section 3(2)(a) and Self imposed to preclude PSD requirements]

Compliance Demonstration Method:

Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)]

3. Testing Requirements: None

4. Specific Monitoring Requirements:

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The permittee shall perform a qualitative visual observation of the opacity at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to bring the opacity into compliance.

5. Specific Recordkeeping Requirements:

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The qualitative visual observations and any opacity readings which exceed the standard.

6. Specific Reporting Requirements: None

7. Specific Control Equipment Operating Conditions: None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

21 (RB2) Line # 2 Ribbon Machine.

Description: The Ribbon machine uses glass drawn from the forehearth. The bulbs that are formed on the ribbon machine are discharged onto a conveyor and sent to the lehr. The emissions are vented uncontrolled.

Construction/ modification commenced: Before 1975.

APPLICABLE REGULATIONS:

401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations: None

2. Emission Limitations:

- a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
- b. Particulate emissions shall not exceed 0.3 lbs/hr and 1.32 tons/yr [401 KAR 61:020, Section 3(2)(a) and Self imposed to preclude PSD requirements]

Compliance Demonstration Method:

Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)]

3. Testing Requirements: None

4. Specific Monitoring Requirements:

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The permittee shall perform a qualitative visual observation of the opacity at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to bring the opacity into compliance.

5. Specific Recordkeeping Requirements:

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The qualitative visual observations and opacity readings which exceed the standard.

6. Specific Reporting Requirements: None

7. Specific Control Equipment Operating Conditions: None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

38 (RB3) Line # 3 Ribbon Machines- Two Interchangeable Machines.

Description: The Ribbon machines use glass drawn from the forehearth. The bulbs that are formed on the ribbon machines are discharged onto a conveyor and sent to the Lehr. The emissions are vented uncontrolled.

Date commenced: September 2, 1987.

APPLICABLE REGULATIONS:

401 KAR 59:010, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Visible emissions shall not equal or exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].
- b. Particulate emissions shall not exceed 0.32 lbs/hr and 1.32 tons/yr [401 KAR 59:010, Section 3(2)(a) and self-imposed to preclude PSD requirements]

Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)]

3. **Testing Requirements:** None

4. **Specific Monitoring Requirements:**

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The monthly hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to bring the opacity into compliance.

5. **Specific Recordkeeping Requirements:**

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The monthly hours of operation.
- b. Opacity readings which exceed the standard.

6. **Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:** None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

37 (F4) Line # 3 Forehearth.

Description: Molten and refined glass from the melter passes through Forehearths and bowls before being drawn to the Ribbon Machines. It is natural gas fired with a burner rated capacity of

0.00365 MMCF per hour.
Construction commenced: 1987.

Applicable Regulations: None

1. Operating Limitations: None

2. Emission Limitations:

Nitrogen oxide emission rate shall not exceed 1.6 tons/year, calculated as a 12 month rolling average. (Self imposed to preclude applicability of 40 CFR §52.21 (401 KAR 51:017, Prevention of significant deterioration to ambient air)).

Compliance Demonstration Method:

$$\text{NO}_x \text{ emissions (tons/month)} = \text{Amount of natural gas used per month (in MMCF/month)} \\ * 100 \text{ lbs/MMCF} * (1/2000 \text{ lbs/ton})$$

3. Testing Requirements: None

4. Specific Monitoring Requirements: None

5. Specific Record keeping Requirements:

To show compliance with the emissions limitations in accordance with 401KAR 50:035, Section 7(1)(d)2, the permittee shall keep records of any information required in the above equations, specifically natural gas usage per hour.

6. Specific Reporting Requirements:

To demonstrate continuous compliance with the NO_x emission limitation in accordance with 401KAR 50:035, Section 7(1)(e)2, the permittee shall provide quarterly reports, to Division's Frankfort Central Office, containing the results of the emission calculations performed using the equation shown above. All reports shall be post marked by the thirtieth (30th) day following the end of each calendar quarter.

7. Specific Control Equipment Operating Conditions: None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

40 (L3) Line # 3 Lehr.

Description: The Lehr is connected to the downstream end of the ribbon machine. It employs natural gas fired burners to maintain the appropriate temperature for stress relief in the bulbs. The burners rated capacity is 0.00365 MMCF per hour.
Construction commenced: 1987.

Applicable Regulations: None**1. Operating Limitations:** None**2. Emission Limitations:**

Nitrogen oxide emission rate shall not exceed 1.6 tons/year, calculated as a 12 month rolling average. (Self imposed to preclude applicability of 40 CFR §52.21 (401 KAR 51:017, Prevention of significant deterioration to ambient air)).

Compliance Demonstration Method:

$\text{NO}_x \text{ emissions (tons/month)} = \text{Amount of natural gas used per month (in MMCF/month)} * 100 \text{ lbs/MMCF} * (1/2000 \text{ lbs/ton}).$

3. Testing Requirements: None**4. Specific Monitoring Requirements:** None**5. Specific Record keeping Requirements:**

To show compliance with the emissions limitations in accordance with 401KAR 50:035, Section 7(1)(d)2, the permittee shall keep records of any information required in the above equations, specifically natural gas usage per hour.

6. Specific Reporting Requirements:

To demonstrate continuous compliance with the NO_x emission limitation in accordance with in accordance with 401KAR 50:035, Section 7(1)(e)2, the permittee shall provide quarterly reports, to Division's Frankfort Central Office, containing the results of the emission calculations performed using the equation shown above. All reports shall be post marked by the thirtieth (30th) day following the end of each calendar quarter.

7. Specific Control Equipment Operating Conditions: None**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****36 (H8) North American Boiler.**

Description: A natural gas fired boiler used to produce steam at the plant. The burner rated capacity is 11.7 mmBtu per hour.

Date commenced: March 18, 1985.

Applicable Regulations:

Regulation 401 KAR 59015, New indirect heat exchangers.

1. Operating Limitations: None

2. Emission Limitations:

- a. Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six-minute average.
- b. Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b) particulate emissions shall not exceed 0.031 lbs/mmBTU and 1.53 tons/yr as measured by Reference Method 5, 40 CFR 60, Appendix A.
- c. Pursuant to Regulation 401 KAR 59:015, Section 5(1)(b) sulfur dioxide emissions shall not exceed 1.87 lbs/mmBTU and 89.85 tons/yr.

3. Testing Requirements: None

4. Specific Monitoring Requirements:

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The monthly usage rate of natural gas.
- b. The monthly hours of operation.
- c. The permittee shall perform a qualitative visual observation of the opacity at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to bring the opacity into compliance .

5. Specific Recordkeeping Requirements:

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The monthly usage rate of natural gas.
- b. The monthly hours of operation.
- c. Opacity readings which exceed the standard.

6. Specific Reporting Requirements: None

7. Specific Control Equipment Operating Conditions: None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

24 (CR1) Hard Chromium Electroplating, Stripping (CR-2B)

Description: This emission unit includes equipment and activities used to chrome plate tip surfaces. Electric current is used in the plating tank. The stripping process uses alkaline stripping agents to remove residual chromium plating which must be removed before replating the blow tips. All emissions are controlled through a composite mesh pad scrubbing system (AAF Colag)
Date commenced: After 1975.

Applicable Regulations:

40 CFR 63, Subpart N-National emission standards for chromium emissions from hard and decorative chromium electroplating and chromium anodizing tanks.

1. Operating Limitations:

Section 63.342(f) Work practice standards:

1.
 - (i) At all times, including periods of startup, shutdown, and malfunction, owners the permittee shall operate and maintain the affected source in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by paragraph 3 of Section 63.342(f)
 - (ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by paragraph 3 of Section 63.342(f).
 - (iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
2.
 - (i) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
 - (ii) Based on the results of a determination made under paragraph 2(i) of Section 63.342(f), the Division may require that the permittee make changes to the operation and maintenance plan required by paragraph 3 of Section 63.342(f) for that source. Revisions may be required if the Division finds that the plan:
 - (A) Does not address a malfunction that has occurred;
 - (B) Fails to provide for the operation of the affected source, the air pollution control techniques, and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - (C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**1. Operating Limitations: (continued)****3. Operation and maintenance plan**

- (i) The permittee shall prepare an operation and maintenance plan to be implemented upon startup. The plan shall include the following elements:
 - (A) The operation and maintenance criteria for the affected source, the add-on air pollution control device, and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
 - (B) The work practice standards for the control equipment, as identified in Table 1 of Section 63.342;
 - (C) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - (D) The plan shall include a systematic procedure for identifying malfunctions of

process equipment, add-on air pollution control devices and process
and control system monitoring equipment and for implementing
corrective actions to address such malfunctions.

- (ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device and monitoring equipment during similar malfunction events, and a program for corrective action for such events.
- (iii) If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph (3)(i) of Section 63.342, the permittee shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the division.

2. Emission Limitations:

Chromium emissions shall not equal or exceed 0.03 mg/dscm or 1.3E-05 gr/dscf [40CFR63, Subpart N, Section 63.342(c)(ii)].

The chromium plating tank was tested on February 19, 1997, and was determined to be in compliance with the standard.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

GE shall conduct a chromium compliance test on the composite mesh pad scrubbing system stack within one year of the issuance date of this permit, using U.S.EPA Reference Method 306.

4. Specific Monitoring Requirements:

The permittee shall monitor the following:

- (a) The pressure drop across the composite mesh-pad system once per day and ensure it remains between 4.25 and 6.26 inches of water as determined during the latest compliance test. [40CFR63, Subpart N, Section 63.343(c)(1)(ii)].
- (b) Once per quarter visually inspect the composite mesh-pad scrubber to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the mesh-pad scrubber. [40CFR63, Subpart N, Section 63.342]
- (c) Once per quarter visually inspect back portion of the mesh-pad closest to the fan to ensure there is no breakthrough of chromic acid mist.[40CFR63, Subpart N, Section 63.342]
- (d) Once per quarter visually inspect ductwork from tank to the control device to ensure there are no leaks. [40CFR63, Subpart N, Section 63.342]
- (e) Perform washdown of the composite mesh-pads in accordance with the manufacturers

- recommendations. [40CFR63, Subpart N, Section 63.342]
- (f) Water flow through the scrubber shall equal or exceed 2 GPM at all times.
 - (g) Water must bubble in the filter pad section.
 - (h) Filter pads and nozzles shall be checked visually at least once per day.
 - (i) The fan amperage gauge shall remain in the range of 18 to 30 amps at all times.

5. Specific Recordkeeping Requirements:

- (1) The permittee shall retain records of opacity readings that exceed the standard. [401 KAR 50:035, Section 7(1)(d)2]
- (2) The permittee shall retain records of the following [63.346(b)]:
 - a. Inspection records for the add-on air pollution control device, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of Section 63.342(f) and Table 1 of Section 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
 - b. Maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment.
 - c. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements: (continued)

- d. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
- e. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by Section 63.342(f)(3) and detailed in part 3. of Operating limitations.
- f. Test reports documenting results of all performance tests.
- g. All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of Section 63.344(e).
- h. Records of monitoring data required by Section 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected as required by 4. Specific Monitoring Requirements.
- i. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment.
- j. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment.
- k. The total process operating time of the affected source during the reporting period.
- l. The actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility

- expended during each month of the reporting period, and the total capacity expended to date for a reporting period, and the total capacity expended to date for a reporting period, if the permittee or operator is using the actual cumulative rectifier capacity to determine facility size in accordance with Section 63.342(c)(2).
- m. Documentation supporting the notifications and reports required by Section 63.347 and listed under Part 6. Specific Reporting Requirements.

6. Specific Reporting Requirements:

Methods of Reporting:

1. Reports may be sent by U.S. mail, fax, another courier, or, if acceptable to both the permittee and the division, by electronic media.
 - (i) Submittals sent by U.S. mail shall be postmarked on or before the specified date.
 - (ii) Submittals sent by other methods shall be received by the division on or before the specified date.

Notification of Compliance Status: Section 63.347(e)

- (1) After a Title V permit has been issued to the permittee or operator, the notification of compliance status shall be submitted to the Permit Review Branch. The notification shall list the following:
 - (i) The applicable emission limitation and the methods that were used to determine compliance with this limitation.
 - (ii) The composite mesh-pad scrubber's water flow rate, pressure drop, and the fan amperage. A range of values is also acceptable as long as it shows compliance with the applicable emission limits.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

- (iii) The methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements, if methods differ from those identified in Subpart N.
- (iv) A description of the air pollution control technique.
- (v) A statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the work practice standards in Section 63.342(f).
- (vi) Since the permittee determined the facility size to be small based on actual cumulative rectifier capacity in accordance with Section 63.342(c)(2), the permittee shall keep records to support their findings. Records from any twelve (12) month period preceding the change to meet a small designation shall be provided.
- (vii) A statement by the permittee or operator as to whether the source has complied with the provisions of Subpart N.

Ongoing Compliance Status Reports: The permittee shall prepare a summary report to document the ongoing compliance status of the affected source. The summary report shall be submitted semiannually except when;

- (1) The Division determines on a case-by case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or
- (2) The monitoring data collected by the permittee or operator of the affected source in accordance with Section 63.343(c) show that the emission limit has been exceeded, in which case a quarterly reports shall be submitted. Once the permittee or operator of an

affected source reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency under paragraph (g)(2) of Section 63.347 is approved.

Contents of Ongoing Compliance Status Reports

The report must contain the following information: [Section 63.347g(3)]

1. The company name and address of the affected source.
2. An identification of the operating parameters that are monitored for compliance determination, Section 63.343(c).
3. The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status detailed in Notification of Compliance Status above.
4. The beginning and ending dates of the reporting period.
5. A description of the type of process performed in the affected source.
6. The total operating time of the affected source during the reporting period.
7. The actual cumulative rectifier capacity expended during the reporting period, on a month by month basis.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**6. Specific Reporting Requirements: (continued)**

8. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes.
9. A certification by a responsible official, as defined in Section 63.2, that the work practice standards in Section 63.342(f) were followed in accordance with the operation and maintenance plan for the source.
10. If the operation and maintenance plan required by Section 63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report required by Section 63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed.
11. A description of any changes in monitoring, processes, or controls since the last reporting period.
12. The name, title, and signature of the responsible official who is certifying the accuracy of the report.
13. The date of the report.

7. Specific Control Equipment Operating Conditions:

Maintain on site daily log for the mesh-pad composite scrubber. The permittee shall monitor and record on daily basis the following:

- (a) The pressure drop across the composite mesh-pad system once per day and ensure it remains between 4.25 and 6.26 inches of water as determined during the latest compliance test. [40CFR63, Subpart N, Section 63.343(c)(ii)].
- (b) Once per day visually inspect the composite mesh-pad scrubber to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the mesh-pad scrubber. [40CFR63, Subpart N, Section 63.342]
- (c) Once per day visually inspect back portion of the mesh-pad closest to the fan to ensure there is no breakthrough of chromic acid mist.[40CFR63, Subpart N, Section 63.342]
- (d) Once per day visually inspect ductwork from tank to the control device to ensure there are no leaks. [40CFR63, Subpart N, Section 63.342]
- (e) Perform washdown of the composite mesh-pads in accordance with the manufacturers recommendations. [40CFR63, Subpart N, Section 63.342]
- (f) Water flow through the scrubber shall equal or exceed 2 GPM at all times.
- (g) The fan amperage gauge shall remain in the range of 18 to 30 amps at all times.
- (h) Water must bubble in the filter pad section.
- (i) Filter pads and nozzles shall be checked visually at least once per day.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

29 (AE-1) Acid Etching and Reclaim Area.

Description: This emission unit includes equipment and activities used to etch the glass envelope's interior. As part of this etching process GE manufactures 60% hydrogen fluoride acid, etch acid and lyons acid. Each of the acids are formulated using various amounts of the 70% hydrofluoric acid which is stored in a 15,000 gallon bulk storage tank. Batch mixing of these acids takes place in a mixing vessel called the mix can. After the acids are mixed, they get pumped to their appropriate storage tanks. The 60% HF acid is diluted to 30-45% HF in the fortifier acid settling tank. Depending upon the type of frosting to be produced, the appropriate acid is pumped to the frosting machine where it is sprayed into the interior of the envelopes.

The affected facilities covered under this emission unit are; 70% HF storage tank, ammonium hydroxide storage tank, batch mix tank, etch acid reclaim, etch tank, lyons or water rinse tank, fortifier or rinse, fortifier, hot water rinse, mix tank for NH_4FHF solution, hot water or NH_4FHF rinse, inspection belt, packing acid splatter tray, crusher, lyons acid storage, fortifier acid storage, fortifier acid settling tank, fortifier acid storage from settling tank, spent lyons acid tank, upper settling from fortifier acid settling tank, lower settling from upper settling, cooker #1, cooker #2, cooker #3, evaporator pan #1, evaporator pan #2, evaporator pan #3, evaporator #4, reclaim buggies #1, reclaim buggies #2, reclaim buggies #3, reclaim buggies #4.

Date commenced: After 1975.

Applicable Regulations:

401 KAR 59:010, Section 3(1)(a), New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

State-origin Applicable Regulations:

401 KAR 53:010, Ambient air quality standards.

1. Operating Limitations:

To assure compliance with the emission limitations listed herein and to assure that gaseous fluoride emissions do not cause an exceedance of the primary and secondary standards listed in Appendix A to 401 KAR 53:010, Ambient air quality standards, the following self-imposed operating limitations shall be met:

- i. The upper settling tank shall not be filled more than three times in any eight (8) hour shift.
- ii. The 70% HF bulk storage tank shall be pressurized a minimum of 6 hours per day.
- iii. Maximum fill rate of the 70% HF bulk storage tank shall not exceed 3922 gallons per hour and shall not be filled more than once in any 24 hour period. The maximum throughput shall not exceed more than 17,731 gallons per month. After each fill, all filling lines shall be purged with air. The purge time shall not be less than five minutes. All purge air shall be directed into the tank and controlled by the scrubbing system.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations: (continued)

iv. The mix can shall not exceed the following production limitations:

Etch acid	142,975 lbs/month
Lyons acid	48,800 lbs/month
Fortifying acid	103,133 lbs/month

v. The mix can operation shall not occur during the filling of the 70% HF bulk storage tank.

2. Emission Limitations:

a. Visible emissions shall not equal or exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].

b. Particulate emissions shall not exceed 5.68 lbs/hr [401 KAR 59:010, Section 3(2)(a)]

c. PM₁₀ emission rate shall not exceed 3.4 lbs/hr. [Self imposed to assure that the annual emission rate remains below the significant net emission increase defined in 401KAR 51:017, PSD]

d. HF emission rates shall not exceed 0.090 lbs/hr except during the filling of the 70% HF bulk storage tank where the emission rate shall not exceed 0.198 lbs/hr. [Self imposed to assure compliance with gaseous fluoride standards in 401KAR53:010]

Compliance Demonstration Method

To ensure compliance with the particulate and PM₁₀ allowables, GE shall use the following equation:

Emission rate in (lbs/hr) = [monthly operating rate x Emission factor listed in Kentucky EIS / (hours of operation per month)]

Compliance with the HF limits is ensured by achieving compliance with the operating and monitoring parameters of the scrubbers.

3. Testing Requirements:

GE shall conduct a hydrogen fluoride compliance test on the 75 HP scrubber stack within one year of the issuance date of this permit, using U.S.EPA Reference Method 13B.

4. Specific Monitoring Requirements:

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The permittee shall perform a qualitative visual observation of the opacity from the scrubber stack at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to bring the opacity into compliance.
- b. The monthly process rate and monthly hours of operation.
- c. All ductwork for the scrubbers shall be inspected daily.
- d. The nozzles on the ejector and tray scrubbers shall be checked visually or electronically at least once per day.
- e. To assure compliance with the emission limitations listed herein and to assure that gaseous fluoride emissions do not cause an exceedance of the primary and secondary standards listed in Appendix A to 401 KAR53:010, Ambient air quality standards, the permittee shall monitor to ensure that:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

- i. The 70% HF bulk storage tank:
 1. Is pressurized a minimum of 6 hours per day.
 2. Is not filled at a rate which exceeded 3922 gallons per hour.
 3. Is not filled more than once in any 24 hour period.
 4. Has a monthly throughput of less than 17731 gallons.
 5. Has filling lines purged at least 5 minutes into the tank controlled by the scrubbing system after each filling.
- ii. The mix can does not exceed the following production limitations:

Etch acid	142,975 lbs/month.
Lyons acid	48,800 lbs/month.
Fortifying acid	103,133 lbs/month.
- iii. Operation of the mix can does not occur during the filling of the 70% HF bulk storage tank.

5. Specific Recordkeeping Requirements:

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The qualitative visual observations and any opacity readings which exceed the standard.
- b. How many hours the 70% HF bulk storage tank was pressurized each day.
- c. Monthly production limits of etch acid, lyons acid, and fortifying acid.
- d. Monthly hours of operation.
- e. See more requirements under 7. Specific control equipment operating conditions.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

For the purpose of demonstrating continuous compliance, the following requirements shall be presumed to yield reliable data upon which the permittee may rely:

- a. 20 HP ejector scrubber and mist eliminator
 1. Recirculating water flow through the unit shall be between 110 and 130 gallons per minute at all times.
 2. Pressure differential across the system shall be between 1.0 and 4.0 inches of water.
 3. Water must be freely draining from the unit.

4. Ejector scrubber pump must be running.
5. The pressure drop shall be measured and recorded daily either manually or electronically.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions: (continued)

- b. 75 HP tray absorber and two mist eliminators
 1. Recirculating water flow rate shall be between 75 and 90 GPM at all times.
 2. Pressure differential across the scrubbing system shall be 19 and 24 inches of water.
 3. Water must be freely draining from the unit.
 4. Recirculating water shall have a minimum pH of 5 at all times.
 5. Induced draft fan must be running.
 6. The frosting machine computer monitoring system shall continuously monitor and record the fume removing system, recirculating water PH, and the flow rate across the 75 HP scrubbing system.
 7. The pressure drop shall be measured and recorded daily.

Records of the above mentioned parameters for both scrubbers and the periodic maintenace shall be kept in accordance with the applicable provisions specified in GE's Standard Operating Procedures manual.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS(I) The two emission units listed below share the same control equipment and have the same applicable regulations, operating limitations and emission limitations.

A2 (BM-1B) Bulk raw material unloading bucket elevator

Description: This emission unit comprise the equipment and activities involved in the unloading and conveying to storage of bulk raw materials (including external cullet), received at the facility. This material is subsequently used to produce glass in the furnace at the plant. The emissions are vented to a Flexclean baghouse (BG-1).

Construction/ modification commenced: 1987.

A3 (BM-1C) Bulk raw material shuttle conveyer room

Description: This emission unit comprise the equipment and activities involved in the unloading and conveying to storage of bulk raw materials (including external cullet), received at the facility. This material is subsequently used to produce glass in the furnace at the plant. The emissions are vented to a Flexclean baghouse (BG-1).

Construction/ modification commenced: 1987.

APPLICABLE REGULATIONS:

401 KAR 59:010, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. Operating Limitations: None**2. Emission Limitations:**

- a. Visible emissions shall not equal or exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].
- b. Particulate emissions shall not exceed 12.5 lbs/hr and 54.75 tons/yr [401 KAR 59:010, Section 3(2)(a) and Self imposed to preclude PSD requirements]
Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)] x [100 - baghouse control efficiency]

3. Testing Requirements: None**4. Specific Monitoring Requirements:**

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. The monthly hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity from the baghouse stack at least once per week. If the opacity is perceived or believed to exceed the standard, the permittee shall determine the opacity of emissions using U.S.EPA Reference Method 9, and make any necessary repairs to the baghouse.
- c. The pressure drop across the baghouse at least once per day.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:

- a. The monthly hours of operation.
- b. Monthly process rate.
- c. The daily pressure drop readings across the baghouse.
- d. Qualitative opacity readings from the baghouse stack and any opacity readings which exceed the standard.

6. **Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:** None.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS (II) The five emission units listed below share the same control equipment and have the same applicable regulations, operating limitations and emission limitations.

The emission units below comprise the equipment and activities involved in storage of bulk raw materials at the facility. Each silo is used to store a specific raw material. Emissions from all silos are vented to a Flexclean baghouse (BG-1). All silos were constructed/modified after 1975.

A5(BM-2B)	Feldspar silo.
A6(BM-2C)	Sand silo.
A7(BM-2A)	Cullet silo.
A8(BM-2E,2F)	Two soda ash silos.
A9(BM-2D)	Dolomite split silo.

APPLICABLE REGULATIONS:

401 KAR 59:010, Section 3(1)(a), New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. Operating Limitations: None

2. Emission Limitations:

- a. Visible emissions shall not equal or exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].
- b. Particulate emissions shall not exceed 0.4 lbs/hr and 1.65 tons/yr [401 KAR 59:010, Section 3(2)(a) and Self imposed to preclude PSD requirements]

Compliance Demonstration Method

Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)] x [100 - baghouse control efficiency]

3. Testing Requirements: None

4. Specific Monitoring Requirements:

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

- a. Amount and type of materials added to each silo each month.
- b. The pressure drop across the baghouse at least once per day.
- c. Qualitative opacity from the baghouse stack and any opacity readings which exceed the standard.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements: None

6. Specific Reporting Requirements: None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS (III) All the emission units listed have the same applicable regulations, operating limitations, and emission limitations. These emission units are comprised of equipment and activities to produce blended batch material and cullet. Bulk materials (except cullet) are transferred from storage silos and bins to weigh scales onto a gathering belt. After the weight of these ingredients is rechecked, they are delivered through a hopper to a mixer. The mixed ingredients

are transferred to the blending system which also receives cullet from the cullet transfer emission unit. Mixed raw materials and cullet is blended to produce a blended batch, which is delivered to the furnace charge bin.

All emission units below commenced construction/operation after 1975.

A11 (-) Batch bucket elevator (BM-4G2) and blended batch elevator (BM-4J).

Rated capacity is 50 tons/hr.

A12 (-) Gathering belt conveyer (BM-4G1), vibratory feeder (BM-4M) and blending belt conveyer (BM-4N1 and BM-4N2).

Rated capacity for each component of this emission unit is 50 tons/hr.

A13 (-) Raw material weigh scales (BM-4F), check weigh scale (BM-4G3) and mixed batch scale (BM-4K).

Rated capacity for each component of this emission unit is 50 tons/hr, except for (BM-4F) which has a rated capacity of 49.5 tons/hr.

A14 (-) Batch hopper and mixer (BM-4H).

Rated capacity is 50 tons/hr.

A15 (-) Feldspar weighing vibratory feeder & screw conveyer (BM-4A1).

Rated capacity is 44 tons/hr.

A16 (-) Sand weighing-conveying (BM-4B).

Rated capacity is 52.6 tons/hr.

A17 (-) Dolomite weighing-conveying (BM-4C).

Rated capacity is 15.6 tons/hr.

A18 (-) Soda ash weighing-conveying (BM-4D).

Rated capacity is 11.1 tons/hr.

APPLICABLE REGULATIONS:

401 KAR 59:010, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

a. Visible emissions shall not equal or exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].

b. Particulate emissions from the mix-house dust collector (BG-2) shall not exceed 2.85 lbs/hr and 12.5 tons/yr [401 KAR 59:010, Section 3(2)(a) and Self imposed to preclude PSD requirements]

Particulate emission rate in (lbs/hour) =[Monthly operating rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)] x [100 - baghouse control efficiency]

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. **Testing Requirements:** None

4. **Specific Monitoring Requirements:**

The permittee shall monitor the following [401KAR 50:035, Section 7(1)(c)2]:

a. The monthly hours of operation.

b. The monthly process rate.

- c. Qualitative opacity from the baghouse stack and any opacity readings which exceed the standard.
 - d. Pressure drop readings across the baghouse at least once per day.
5. **Specific Recordkeeping Requirements:**
The permittee shall retain records of the following [401KAR 50:035, Section 7(1)(d)2]:
 - a. The monthly hours of operation.
 - b. The monthly process rate.
 - c. Qualitative opacity from the baghouse stack and any opacity readings which exceed the standard.
 - d. The pressure drop readings across the baghouse.
6. **Specific Reporting Requirements:** None
7. **Specific Control Equipment Operating Conditions:** None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Minor ingredients rotary mixer (0.9 tons/hr)	401 KAR 63:010
2. Minor ingredients storage bins (4) rated at total of 1.5 tons/hr.	401 KAR 61:020
3. Minor ingredients weigh scale	401 KAR 63:010

	(0.5 tons/hr)	
4.	Bulk raw material unloading pit.	401 KAR 63:010
5.	Cart loading during process upsets at blended batch elevator (50.0 tons/hr)	401 KAR 63:010
6.	Dust recycling system	401 KAR 59:010
7.	No. 1 Forehearth (4.8 mmBtu/hr)	None
8.	No. 2 Forehearth (4.8 mmBtu/hr)	None
9.	Needle preheat	None
10.	No. 1 Lehr (2.7 mmBtu/hr)	None
11.	No. 2 Lehr (2.7 mmBtu/hr)	None
12.	Ammonium strearate application on lines 1, 2, and 3.	None
13.	Clear packaging-line No. 1 (4.33 tons/hr)	401 KAR 63:010
14.	Clear packaging-line No. 2 (4.33 tons/hr)	401 KAR 63:010
15.	Two clear packaging-line No. 3 (4.33 tons/hr, each)	401 KAR 63:010
16.	Mold preparation	401 KAR 61:020
17.	Lime silo	401 KAR 59:010
18.	Welding hood	401 KAR 61:020
19.	Space heaters	None
20.	Steam jenny	None
21.	Parts cleaners (4)	None
22.	Parking lots and roads	401 KAR 63:010
23.	Cooling towers	40 CFR 63, Subpart Q
24.	Fuel storage tanks	None
25.	Ink jet printer	None
26.	Cross cullet conveyer(5D1), cullet scale (5D2), and cullet vibratory feeder to blended batch elevator(5D3).	None

SECTION C - INSIGNIFICANT ACTIVITIES (continued)

<u>Description</u>	<u>Generally Applicable Regulation</u>
27. Bulk knock-off hammer-ribbon machine 1	None
28. Bulk knock-off hammer-ribbon machine 2	None
29. Bulk knock-off hammer-ribbon machine 3	None
30. Mixed batch surge bin	401 KAR 59:010
31. Tray machine #1	401 KAR 59:010
32. Inspection-line #1	401 KAR 59:010
33. Inspection-line #2	401 KAR 59:010
34. Erie Boiler - Natural gas burner rated at 8 mmBtu/hr.	401 KAR 61:015
35. Bead blaster	401 KAR 59:010
36. Waste water treatment	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING

REQUIREMENTS

None

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements.
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

5. Summary reports of any monitoring required by this permit, other than the NO_x continuous emission monitor, shall be reported to the Division's Frankfort Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the NO_x continuous emission monitor shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
6.
 - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Frankfort Regional Office concerning startups, shutdowns, or malfunctions as follows:
 1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made within (3) days by telephone (or other electronic media) and shall cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Frankfort Regional Office within three (3) days of occurrence.
7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Frankfort Regional Office and U.S.EPA in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality	Division for Air Quality	U.S.EPA Region IV
Frankfort Regional Office	Central File Room	Air Enforcement Branch
643 Teton Trail Suite B	803 Schenkel Lane	Atlanta Federal Center
Frankfort, KY 40601	Frankfort, KY 40601	100 Alabama Street, S.W.
		Atlanta, GA 30303-8960

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) [and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the division, in writing, information that the division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
5. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
6. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(k)]

SECTION G - GENERAL CONDITIONS (CONTINUED)

7. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
8. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
9. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
10. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
11. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
12. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035 , Permits, Section 7(2)(b)5]
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
14. Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
15. All previously issued construction and operating permits are hereby subsumed into this permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 50:035, Permits, Section 12]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Compliance Certification Requirements

Pursuant to Section VII 2.2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:0016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(e) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the division as promptly as possible and submitted written notice of the emergency to the division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (e)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

(f) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
 - a. Submit a Risk Management Plan to U.S.EPA, Region IV with a copy to this division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S.EPA.
 - b. Submit additional relevant information if requested by the division or the U.S. EPA.

(g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION G - GENERAL CONDITIONS (CONTINUED)

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.